act as irritants; that exposed parts are in almost all cases the starting-point of the eruption; that the skin reflexes are more widely distributed and more easily excited in the infant than in the adult, and that most of the 60 cases observed began in the colder seasons of the year. He suggests that what is called eczema is a form of reaction of the neuro-cutaneous apparatus to external irritation, which is not present in most people.

Cutaneous Ankylostomiasis.—W. DUBREUILH (*New York Medical Journal*, May 20, 1905, p. 1025) has investigated the literature of this subject, and arrives at the conclusion from the observations made that the disease known as "ground itch" is caused by various forms of ankylostoma, the larvæ of which are to be found in the soil.

Lichen Pilaris seu Spinulosus.—H. G. ADAMSON (*British Journal of Dermatology*, February and March, 1905) considers under this name a disease met with chiefly in children, especially boys, localized more or less symmetrically on buttocks and extremities, characterized by minute filiform corneous papules arranged in small groups or aggregations. The pathological process is a hyperkeratotic formation at the orifices of the sebaceous glandular ducts. The papules are only slightly reddened, and itching is wanting. It is the same disease formerly described by Hardy, Letars, and Vidal under the name "acné cornée." In children sometimes, and generally in adults, this disease is associated with lichen planus.

Epidemic of Herpes Zoster.—OTTO SACHS (*Dermatologische Zeitschrift*, September, 1905, p. 601) describes an epidemic which occurred in Breslau in 1901, the number of cases observed being 69, 8 of which were H. labialis and facialis, 19 H. progenitalis, 12 H. zoster facialis, 8 H. zoster occipitocollaris, etc. The disease occurred during the period of June to November, and the symptoms were relatively mild, prodromals being wanting or slight. The ages of the persons were from three to seventy-three years, but mostly middle age, women and children furnishing the most cases. The author thinks that the forms of herpes known as facialis and progenitalis should be grouped with the so-called zosters.

The Use of the X-rays in Some Skin Affections.—F. S. BURNS (*Boston Medical and Surgical Journal*, June 22, 1905) refers to the value of this agent in folliculitis, and states that if properly applied it will heal almost every case and cure a large number. Temporary alopecia is desired, and to produce this end he uses a tube having a penetration of 0.5 cm. of albuminum, the rays emanating from such a tube being almost entirely absorbed by the skin. The affected area should be exposed at five inches' distance from the anticathode and applications of five minutes given every other day for five times, after which fall of the hair usually occurred. In the treatment of lupus, the author prefers the use of soft tubes and the production of inflammatory reaction over the affected area, causing necrosis of the diseased tissue. When the dosage is properly regulated the author has never observed undesirable results follow this method, and it presents the advantage of shorter sittings and number of exposures, thus curtailing the whole course of treatment. Neighboring healthy skin should be well protected with heavy leaden masks. The advantage of excising or scraping diseased tissue prior to the use of the x-rays is dwelt upon. The open wound usually heals by granulation in from four to eight weeks, the scar comparing favorably with that of cases healed exclusively under the rays.

PATHOLOGY AND BACTERIOLOGY.

UNDER THE CHARGE OF

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A Study of the Bacteriology of Pertussis.—M. WOLLSTEIN (*Journal of Experimental Medicine*, 1905, vol. vii. p. 335) presents the results of a bacteriological study of 30 cases of pertussis, with special reference to the agglutination reactions of the patient's blood. She isolated from the sputum of 29 of the cases an organism which resembled the influenza bacillus. It grew only on hæmoglobin-containing media and was morphologically like the influenza bacillus, except that it was somewhat larger. This organism appears to be the same as that isolated by Spengler and later by Jockmann and Krause, who called it bacillus pertussis, Eppendorf.

The blood of the patients from whom the bacillus was obtained agglutinated in all cases the organism in 1: 200 and sometimes in 1: 500 dilutions. Homologous serum always produced the highest and most complete reactions, but serum from pertussis cases reacted on all strains of the bacillus in as high dilutions as 1: 100. Various control experiments with normal sera were negative.

By immunizing rabbits with the organism and with influenza bacilli, it was found by absorption experiments that each organism produced a group agglutinin affecting the other, but that a small amount of agglutinin specific for the bacillus from the cases of pertussis was also produced by that organism.

The Action of Roentgen Rays on the Blood.—LINSER and HELBER (*Deutsche Arch. f. klin. Med.*, 1905, Bd. lxxxiii. p. 479) find that the x-ray in its destructive effect upon the blood has an election for the white blood cells. This is particularly true of its action upon the circulating blood. Of the different forms of white blood cells the lymphocytes are least resistant to the action of the rays. Through the destruction of the white blood cells in the circulating blood, as well as in leukocyte-containing fluids without the body, there is formed in the serum a leukotoxin. The injection of such serum into other animals produces a marked fall in the numbers of leukocytes in the circulating blood.